

Title (en)
DENSE ARTICLES FORMED FROM TETRAFLUROETHYLENE CORE SHELL COPOLYMERS AND METHODS OF MAKING THE SAME

Title (de)
DICHTe ARTIKEL AUS TETRAFLUROETHYLEN-KERN-HÜLLE-COPOLYMEREN UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
ARTICLES DENSES FORMÉS À PARTIR DE COPOLYMÈRES DE TÉTRAFLUROÉTHYLÈNE TYPE COEUR-ÉCORCE ET LEURS PROCÉDÉS DE FABRICATION

Publication
EP 3233987 B1 20200819 (EN)

Application
EP 15820348 A 20151203

Priority
• US 201414577597 A 20141219
• US 2015063609 W 20151203

Abstract (en)
[origin: WO2016099914A1] A dense article that includes a dense TFE copolymer film is provided. The dense TFE copolymer film includes a first endotherm between about 50°C and about 300°C, a second endotherm between about 320°C and about 350°C, and a third endotherm between about 350°C and about 400°C. To form the dense article, a core shell TFE copolymer is formed into a pellet, ram extruded into a tape, dried into a dried preform, and then stretched into a dense TFE copolymer film that exhibits improved physical and mechanical properties. The dense TFE copolymer film is produced directly from the dried preform at a deformation temperature less than about 335°C and without increasing the porosity of the dried preform, as would conventionally be done in expansion processes. The dense TFE copolymer films have a methane permeability less than about 20µg*micron/cm2/min. The dense articles have a void volume less than about 20%.

IPC 8 full level
C08J 5/18 (2006.01); **B29C 55/00** (2006.01); **C08F 214/26** (2006.01); **C08F 259/08** (2006.01); **C08L 27/18** (2006.01)

CPC (source: CN EP KR US)
B29C 55/005 (2013.01 - CN EP KR US); **B29C 55/023** (2013.01 - CN); **B32B 15/085** (2013.01 - CN US); **B32B 27/08** (2013.01 - CN US); **B32B 27/322** (2013.01 - CN KR US); **B32B 33/00** (2013.01 - CN); **C08F 214/22** (2013.01 - KR); **C08F 214/24** (2013.01 - KR); **C08F 214/26** (2013.01 - CN EP US); **C08F 214/262** (2013.01 - CN EP KR US); **C08F 259/08** (2013.01 - CN EP KR US); **C08J 5/18** (2013.01 - CN EP KR US); **C08J 9/00** (2013.01 - CN US); **C08L 27/18** (2013.01 - KR); **C08L 51/003** (2013.01 - EP KR US); **C09D 127/18** (2013.01 - CN US); **B29C 55/023** (2013.01 - EP US); **B29K 2027/18** (2013.01 - CN EP KR US); **B29K 2995/0063** (2013.01 - CN EP US); **B29L 2009/00** (2013.01 - CN US); **B32B 2307/30** (2013.01 - CN US); **C08J 2327/18** (2013.01 - CN EP US); **C08L 2207/53** (2013.01 - EP KR US)

C-Set (source: EP US)
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3. **C08L 51/003 + C08L 91/00**

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